

b2

--As shown in FIG. 30, display electrodes 40-1 to 40-8 are formed on the surface of an electrode substrate and arranged in parallel to one another and terminal electrodes 41-1 to 41-8 which are in parallel to one another are arranged with different pitches from pitches of the display electrodes. As described above, when the invention is applied to the active matrix liquid crystal display, the display electrodes 40-1 to 40-8 are scanning signal lines (i.e., gate signal lines or horizontal signal lines) or video signal lines (i.e., drain signal lines or vertical signal lines) in the substrate where switching devices are installed. A plurality of leadout wirings are connected between the parallel display electrodes, scanning signal lines or video signal lines 40-1 to 40-8 and the parallel terminal electrodes 41-1 to 41-8. The leadout wirings include a first portion 40a-1 to 40a-8 which are substantially parallel to the members 40-1 to 40-8 representative of display electrodes, video signal lines or scanning signal lines, second portions 41a-1 to 41a-8 which are substantially parallel to the terminal electrodes 41-1 to 41-8, and inclined linear wiring electrodes 42-1 to 42-8 which connect the first portions 40a-1 to 40a-8 and the second portions 41a-1 to 41a-8. As shown in Fig. 30, at least substantial portions of at least a majority of the inclined linear wiring electrodes are substantially parallel to substantial portion of an adjacent one of the inclined linear wiring electrodes.--

IN THE CLAIMS:

Please amend claims 25, 27, 28, 30-35, 47-49, 51-52 and 54-60 as follows:

b3

21 25. (amended) A liquid crystal display suitable for high-quality display comprising:

a pair of liquid crystal device substrates arranged so as to be opposite to each other and joined together by a sealant with a liquid crystal interposed therebetween
and;

at least one liquid crystal drive element for driving the liquid crystal;

wherein the liquid crystal display device substrates comprise:

a plurality of parallel display electrodes;

a plurality of parallel terminal electrodes led out to an end portion of the liquid crystal device substrates, connected to the liquid crystal drive element, and having different pitches from pitches of the display electrodes; and

b3
encl 6
a plurality of leadout wirings for connecting the display electrodes and the terminal electrodes, including first portions being substantially parallel to the display electrodes, second portions being substantially parallel to the terminal electrodes and inclined linear wiring electrodes for connecting the first and second portions; and

wherein at least substantial portions of at least a majority of the inclined linear wiring electrodes are substantially parallel to an substantial portions of adjacent one of the inclined wiring electrodes; and

wherein lengths of at least one of first and second portions and widths of the inclined linear wiring electrodes vary.

29 27 (amended) A liquid crystal display suitable for high-quality display comprising:

b4
a pair of liquid crystal device substrates arranged so as to be opposite to each other and joined together by a sealant with a liquid crystal interposed therebetween; and

at least one liquid crystal drive element for driving the liquid crystal;

wherein the liquid crystal device substrates comprise:

a plurality of parallel scanning signal lines;

a plurality of switching devices;

a plurality of parallel terminal electrodes led out to an end portion of the liquid crystal device substrates, connected to the liquid crystal drive element, and having different pitches from pitches of the scanning signal lines; and

a plurality of leadout wirings for connecting the scanning signal lines and the terminal electrodes, including first portions being substantially parallel to the

scanning signal lines, second portions being substantially parallel to the terminal electrodes and inclined linear wiring electrodes for connecting the first and second portions; and

wherein at least substantial portion of at least a majority of the inclined linear wiring electrodes are substantially parallel to substantial portions of an adjacent one of the inclined wiring electrodes; and

wherein lengths of at least one of first and second portions and widths of the inclined linear wiring electrodes vary.

30
28. (twice amended) A liquid crystal display suitable for high-quality display comprising:

a pair of liquid crystal device substrates arranged so as to be opposite to each other and joined together by a sealant with a liquid crystal interposed therebetween; and

at least one liquid crystal drive element for driving the liquid crystal;

wherein the liquid crystal device substrates comprise:

a plurality of parallel video signal lines;

a plurality of switching devices;

a plurality of terminal electrodes led out to an end portion of the liquid crystal device substrates, connected to the liquid crystal drive element, and having different pitches from pitches of the video signal lines; and

a plurality of leadout wirings for connecting the video signal lines and the terminal electrodes, including first portions being substantially parallel to the video signal lines, second portions being substantially parallel to the terminal electrodes and inclined linear wiring electrodes for connecting the first and second portions; and

wherein at least substantial portions of at least a majority of the inclined linear wiring electrodes are substantially parallel to substantial portions of an adjacent one of the inclined wiring electrodes; and

32 30. (amended) wherein lengths of at least one of the first and second portions and widths of the inclined linear wiring electrodes vary.

32 30. (amended) A liquid crystal display suitable for high-quality display comprising:

a pair of liquid crystal device substrates arranged so as to be opposite to each other and joined together by a sealant with a liquid crystal interposed therebetween;

and

at least one liquid crystal drive element for driving the liquid crystal;

wherein the liquid crystal device substrates comprise:

a plurality of parallel display electrodes;

a plurality of parallel terminal electrodes led out to an end portion of the liquid crystal device substrates, connected to the liquid crystal drive element, and having different pitches from pitches of the display electrodes; and

a plurality of leadout wirings for connecting the display electrodes and the terminal electrodes, including inclined linear wiring electrodes which are not parallel to the display electrodes; and

wherein at least substantial portions of at least a majority of the inclined linear wiring electrodes are substantially parallel to substantial portions of an adjacent one of the inclined wiring electrodes.

32 31. (amended) A liquid crystal display suitable for high-quality display comprising:

a pair of liquid crystal device substrates arranged so as to be opposite to each other and joined together by a sealant with a liquid crystal interposed therebetween;

and

at least one liquid crystal drive element for driving the liquid crystal;

wherein the liquid crystal device substrate comprise:

a plurality of parallel scanning signal lines;
a plurality of switching devices;
a plurality of parallel terminal electrodes led out to an end portion of the liquid crystal device substrates, connected to the liquid crystal drive element, and having different pitches from pitches of the scanning signal lines; and
a plurality of leadout wirings for connecting the scanning signal lines and the terminal electrodes, including inclined linear wiring electrodes which are not parallel to the scanning signal lines; and
wherein at least substantial portions of at least a majority of the inclined linear wiring electrodes are substantially parallel to substantial portions of an adjacent one of the inclined wiring electrodes.

34/32. (amended) A liquid crystal display suitable for high-quality display comprising:

a pair of liquid crystal device substrates arranged so as to be opposite to each other and joined together by a sealant with a liquid crystal interposed therebetween;
and

at least one liquid crystal drive element for driving the liquid crystal;
wherein the liquid crystal device substrates comprise:
a plurality of parallel video signal lines;
a plurality of switching devices;
a plurality of parallel terminal electrodes led out to an end portion of the liquid crystal device substrates, connected to the liquid crystal drive element, and having different pitches from pitches of the video signal lines; and
a plurality of leadout wirings for connecting the video signal lines and the terminal electrodes, including inclined linear wiring electrodes which are not parallel to the video signal lines; and

wherein at least substantial portions of at least a majority of the inclined linear wiring electrodes are substantially parallel to substantial portions of an adjacent one of the inclined wiring electrodes.

35 38. (amended) A liquid crystal display suitable for high-quality display comprising:

a pair of liquid crystal device substrates arranged so as to be opposite to each other and joined together by a sealant with a liquid crystal interposed therebetween;
and

at least one liquid crystal drive element for driving the liquid crystal;

wherein the liquid crystal device substrates comprise:

a plurality of parallel display electrodes;

at least one terminal electrode group comprising a plurality of parallel terminal electrodes led out to an end portion of the liquid crystal device substrates, connected to the liquid crystal drive element, and having different pitches from pitches of the display electrodes; and

a plurality of leadout wirings for connecting the display electrodes and the terminal electrodes; and

wherein the leadout wirings connected to the terminal electrodes positioned at least an outer portion have inclined linear wiring electrodes which are not parallel to the display electrode; and

wherein at least substantial portions of at least a majority of the inclined linear wiring electrodes are substantially parallel to substantial portions of an adjacent one of the inclined wiring electrodes.

36 39. (amended) A liquid crystal display suitable for high-quality display comprising:

a pair of liquid crystal device substrates arranged so as to be opposite to each other and joined together by a sealant with a liquid crystal interposed therebetween;
and

at least one liquid crystal drive element for driving the liquid crystal;

wherein the liquid crystal device substrates comprise:

a plurality of parallel scanning signal lines;

a plurality of switching devices;

at least one terminal electrode group comprising a plurality of parallel terminal electrodes led out to an end portion of the liquid crystal device substrates, connected to the liquid crystal drive element, and having different pitches from pitches of the scanning signal lines; and

a plurality of leadout wirings for connecting the scanning signal lines and the terminal electrodes; and

wherein the leadout wirings connected to the terminal electrodes positioned at least an outer portion have inclined linear wiring electrodes which are not parallel to the scanning signal lines; and

wherein at least substantial portions of at least a majority of the inclined linear wiring electrodes are substantially parallel to substantial portions of an adjacent one of the inclined wiring electrodes.

37 ~~35~~ (amended) A liquid crystal display suitable for high-quality display comprising:

a pair of liquid crystal device substrates arranged so as to be opposite to each other and joined together by a sealant with a liquid crystal interposed therebetween;
and

at least one liquid crystal drive element for driving the liquid crystal;

wherein the liquid crystal device substrates comprise:

a plurality of parallel video signal lines;

a plurality of switching devices;

at least one terminal electrode group comprising a plurality of parallel terminal electrodes led out to an end portion of the liquid crystal device substrates, connected to the liquid crystal drive element, and having different pitches from pitches of the video signal lines; and

a plurality of leadout wirings for connecting the video signal lines and the terminal electrodes; and

wherein the leadout wirings connected to the terminal electrodes positioned at least an outer portion have inclined linear wiring electrodes which are not parallel to the video signal lines; and

wherein at least substantial portions of at least a majority of the inclined linear wiring electrodes are substantially parallel to substantial portions of an adjacent one of the inclined wiring electrodes.

25 ~~47~~ (amended) A liquid crystal display according to claim 1, wherein at least substantial portions of at least a majority of the inclined linear wiring electrodes of the plurality of wirings are substantially parallel to substantial portions of an adjacent one of the inclined wiring electrodes at least in an area of the liquid crystal side of the sealant.

26 ~~48~~ (amended) A liquid crystal display according to claim 10, wherein at least substantial portions of at least a majority of the inclined linear wiring electrodes of the plurality of wirings are substantially parallel to substantial portions of an adjacent one of the inclined wiring electrodes at least in an area of the liquid crystal side of the sealant.

40 ~~49~~ (amended) A liquid crystal display suitable for high-quality display comprising:

a pair of liquid crystal device substrates arranged so as to be opposite to each other and joined together by a sealant with a liquid crystal interposed therebetween;
and

at least one liquid crystal drive element for driving the liquid crystal;

wherein the liquid crystal display device substrates comprise:

a plurality of parallel display electrodes;

a plurality of parallel terminal electrodes led out to an end portion of the liquid crystal device substrates, connected to the liquid crystal drive element, and having different pitches from pitches of the display electrodes; and

a plurality of leadout wirings for connecting the display electrodes and the terminal electrodes, including first portions being substantially parallel to the display electrodes, second portions being substantially parallel to the terminal electrodes and inclined linear wiring electrodes for connecting the first and second portions; and

wherein at least substantial portions of at least a majority of the inclined linear wiring electrodes are substantially parallel to substantial portions of an adjacent one of the inclined wiring electrodes at least in an area of the liquid crystal side of the sealant; and

wherein lengths of at least one of first and second portions and widths of the inclined linear wiring electrodes vary.

51. (amended) A liquid crystal display suitable for high-quality display comprising:

a pair of liquid crystal device substrates arranged so as to be opposite to each other and joined together by a sealant with a liquid crystal interposed therebetween;
and

at least one liquid crystal drive element for driving the liquid crystal;

wherein the liquid crystal device substrates comprise:

a plurality of parallel scanning signal lines;

a plurality of switching devices;

a plurality of parallel terminal electrodes led out to an end portion of the liquid crystal device substrates, connected to the liquid crystal drive element, and having different pitches from pitches of the scanning signal lines; and

a plurality of leadout wirings for connecting the scanning signal lines and the terminal electrodes, including first portions being substantially parallel to the scanning signal lines, second portions being substantially parallel to the terminal electrodes and inclined linear wiring electrodes for connecting the first and second portions; and

wherein at least substantial portions of at least a majority of the inclined linear wiring electrodes are substantially parallel to substantial portions of an adjacent one of the inclined wiring electrodes at least in an area of the liquid crystal side of the sealant; and

wherein lengths of at least one of first and second portions and widths of the inclined linear wiring electrodes vary.

43
b2
crit'd
52. (amended) A liquid crystal display suitable for high-quality display comprising:

a pair of liquid crystal device substrates arranged so as to be opposite to each other and joined together by a sealant with a liquid crystal interposed therebetween; and

at least one liquid crystal drive element for driving the liquid crystal;

wherein the liquid crystal device substrates comprise:

a plurality of parallel video signal lines;

a plurality of switching devices;

a plurality of parallel terminal electrodes led out to an end portion of the liquid crystal device substrates, connected to the liquid crystal drive element, and having different pitches from pitches of the video signal lines; and

b2
concl'd

a plurality of leadout wirings for connecting the video signal lines and the terminal electrodes, including first portions being substantially parallel to the video signal lines, second portions being substantially parallel to the terminal electrodes and inclined linear wiring electrodes for connecting the first and second portions; and
wherein at least substantial portions of at least a majority of the inclined linear wiring electrodes are substantially parallel to substantial portions of an adjacent one of the inclined wiring electrodes at least in an area of the liquid crystal side of the sealant; and
wherein lengths of at least one of first and second portions and widths of the inclined linear wiring electrodes vary.

u> 54. (amended) A liquid crystal display suitable for high-quality display comprising:

b2

a pair of liquid crystal device substrates arranged so as to be opposite to each other and joined together by a sealant with a liquid crystal interposed therebetween;
and

at least one liquid crystal drive element for driving the liquid crystal;

wherein the liquid crystal device substrates comprise:

a plurality of parallel display electrodes;

a plurality of parallel terminal electrodes led out to an end portion of the liquid crystal device substrates, connected to the liquid crystal drive element, and having different pitches from pitches of the display electrodes; and

a plurality of leadout wirings for connecting the display electrodes and the terminal electrodes, including inclined linear wiring electrodes which are not parallel to the display electrodes; and

wherein at least substantial portions of at least a majority of the inclined linear wiring electrodes are substantially parallel to substantial portions of an adjacent one

of the inclined wiring electrodes at least in an area of the liquid crystal side of the sealant.

46 ~~55.~~ (amended) A liquid crystal display suitable for high-quality display comprising:

a pair of liquid crystal device substrates arranged so as to be opposite to each other and joined together by a sealant with a liquid crystal interposed therebetween;

and

at least one liquid crystal drive element for driving the liquid crystal;

wherein the liquid crystal device substrate comprise:

a plurality of parallel scanning signal lines;

a plurality of switching devices;

a plurality of parallel terminal electrodes led out to an end portion of the liquid crystal device substrates, connected to the liquid crystal drive element, and having different pitches from pitches of the scanning signal lines; and

a plurality of leadout wirings for connecting the scanning signal lines and the terminal electrodes, including inclined linear wiring electrodes which are not parallel to the scanning signal lines; and

wherein at least substantial portions of at least a majority of the inclined linear wiring electrodes are substantially parallel to substantial portions of an adjacent one of the inclined wiring electrodes at least in an area of the liquid crystal side of the sealant.

47 ~~56.~~ (amended) A liquid crystal display suitable for high-quality display comprising:

a pair of liquid crystal device substrates arranged so as to be opposite to each other and joined together by a sealant with a liquid crystal interposed therebetween;

and

*DA
Circuit*

at least one liquid crystal drive element for driving the liquid crystal;
wherein the liquid crystal device substrates comprise:
a plurality of parallel video signal lines;
a plurality of switching devices;
a plurality of parallel terminal electrodes led out to an end portion of the liquid crystal device substrates, connected to the liquid crystal drive element, and having different pitches from pitches of the video signal lines; and

a plurality of leadout wirings for connecting the video signal lines and the terminal electrodes, including inclined linear wiring electrodes which are not parallel to the video signal lines; and

wherein at least substantial portions of at least a majority of the inclined linear wiring electrodes are substantially parallel to substantial portions of an adjacent one of the inclined wiring electrodes at least in an area of the liquid crystal side of the sealant.

48 ~~57.~~ (amended) A liquid crystal display suitable for high-quality display comprising:

a pair of liquid crystal device substrates arranged so as to be opposite to each other and joined together by a sealant with a liquid crystal interposed therebetween;
and

at least one liquid crystal drive element for driving the liquid crystal;
wherein the liquid crystal device substrates comprise:
a plurality of parallel display electrodes;
at least one terminal electrode group comprising a plurality of parallel terminal electrodes led out to an end portion of the liquid crystal device substrates, connected to the liquid crystal drive element, and having different pitches from pitches of the display electrodes; and

a plurality of leadout wirings for connecting the display electrodes and the terminal electrodes; and

wherein the leadout wirings connected to the terminal electrodes positioned at least an outer portion have inclined linear wiring electrodes which are not parallel to the display electrode; and

wherein at least substantial portions of at least a majority of the inclined linear wiring electrodes are substantially parallel to substantial portions of an adjacent one of the inclined wiring electrodes at least in an area of the liquid crystal side of the sealant.

68
cont'd
49 ~~58~~ (amended) A liquid crystal display suitable for high-quality display comprising:

a pair of liquid crystal device substrates arranged so as to be opposite to each other and joined together by a sealant with a liquid crystal interposed therebetween;
and

at least one liquid crystal drive element for driving the liquid crystal;

wherein the liquid crystal device substrates comprise:

a plurality of parallel scanning signal lines;

a plurality of switching devices;

at least one terminal electrode group comprising a plurality of parallel terminal electrodes led out to an end portion of the liquid crystal device substrates, connected to the liquid crystal drive element, and having different pitches from pitches of the scanning signal lines; and

a plurality of leadout wirings for connecting the scanning signal lines and the terminal electrodes; and

wherein the leadout wirings connected to the terminal electrodes positioned at least an outer portion have inclined linear wiring electrodes which are not parallel to the scanning signal lines; and

wherein at least substantial portions of at least a majority of the inclined linear wiring electrodes are substantially parallel to substantial portions of an adjacent one of the inclined wiring electrodes at least in an area of the liquid crystal side of the sealant.

5° ~~50~~ (amended) A liquid crystal display suitable for high-quality display comprising:

a pair of liquid crystal device substrates arranged so as to be opposite to each other and joined together by a sealant with a liquid crystal interposed therebetween;
and

at least one liquid crystal drive element for driving the liquid crystal;

wherein the liquid crystal device substrates comprise:

a plurality of parallel video signal lines;

a plurality of switching devices;

at least one terminal electrode group comprising a plurality of parallel terminal electrodes led out to an end portion of the liquid crystal device substrates, connected to the liquid crystal drive element, and having different pitches from pitches of the video signal lines; and

a plurality of leadout wirings for connecting the video signal lines and the terminal electrodes; and

wherein the leadout wirings connected to the terminal electrodes positioned at least an outer portion have inclined linear wiring electrodes which are not parallel to the video signal lines; and

wherein at least substantial portions of at least a majority of the inclined linear wiring electrodes are substantially parallel to substantial portions of an adjacent one of the inclined wiring electrodes at least in an area of the liquid crystal side of the sealant.